

What is Claimed is:

1. Data structures for use in a network, comprising:
at least one first data structure having at least one entity per object in addition to routing/forwarding information; and
a second data structure having at least one entity per object in addition to the routing/forwarding information, such that the routing/forwarding information in the first and second data structures is processed using the additional entities.
2. The data structures as claimed in claim 1, wherein the network is a packet switched network.
3. The data structures as claimed in claim 1, wherein the network is a multiprotocol label switching network.
4. The data structures as claimed in claim 1, wherein the first data structure and the second data structure are each implemented as a list having a plurality of entries for each object.
5. The data structures as claimed in claim 1, wherein the entities are pointers.
6. The data structures as claimed in claim 1, wherein the first data structure stores a label information base.
7. The data structures as claimed in claim 1, wherein the second data structure stores a forwarding information base.
8. The data structures as claimed in claim 5, wherein each object in the first data structure comprises a first pointer and a second pointer, the first pointer pointing to the respectively next object in the first data structure, and the second pointer pointing to the respectively previous object in the first data structure.
9. The data structures as claimed in claim 5, wherein each object in the second data structure comprises a pointer which refers to a

respective corresponding object in the first data structure.

10. A computer assisted method, for processing routing/forwarding information in a network by accessing at least one first data structure having at least one entity per object in addition to routing/forwarding information and a second data structure having at least one entity per object in addition to the routing/forwarding information, comprising:

accessing each object to be processed in the first and second data structures using the additional entities; and

processing the routing/forwarding information using standardized algorithms optimized in terms of timing.

11. The method as claimed in claim 10, wherein:

the routing/forwarding information is split at least over the first data structure and the second data structure,

the second data structure has at least one entity per object, which entity makes reference to a corresponding object in the first data structure.

12. The method as claimed in claim 10, wherein

the standardized algorithms are customary list administration algorithms.

13. The method as claimed in claim 10, wherein the standardized algorithms are

DELETE and INSERT algorithms.

14. The method as claimed in claim 10, wherein

the processing of the routing/forwarding information comprises administering changes to the routing/forwarding information.

15. Data structures for a multilayer protocol label switching network, comprising:

a first data structure having a plurality of objects each comprising label information base information and a first routing pointer pointing to the respective next object in the first data structure; and

a second data structure having a plurality of objects each comprising forwarding information base information and a second routing pointer pointing to a corresponding object in the first data structure.

16. A computer assisted method for a multilayer protocol label switching network, comprising:

adding a first routing pointer to label information base information for each object contained in a first data structure, such that each first routing pointer points to a respective next object in the first data structure; and

adding a second routing pointer to forwarding information base information for each object contained in a second data structure, such that each second routing pointer points to a corresponding object in the first data structure.